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2812  
PATENT

Case Docket No. ASMMC.033AUS

Date: May 21, 2002

Page 1

In re application of : KIM et al.  
App. No. : 10/007,304  
Filed : December 5, 2001  
For : COPPER INTERCONNECT  
STRUCTURE HAVING  
STUFFED DIFFUSION  
BARRIER  
Examiner : Unknown  
Art Unit : 2812

I hereby certify that this correspondence and all marked attachments are being deposited with the United States Postal Service as first class mail in an envelope addressed to: United States Patent and Trademark Office, P.O. Box 2327, Arlington, VA 22202, on

May 21, 2002

(Date)

*Adeel S. Akhtar*  
Adeel S. Akhtar, Reg. No. 41,394

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P.O. Box 2327  
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Sir:

Transmitted herewith are the following.

- (X) Establishment of Right of Assignee to Take Action and Revocation and Power of Attorney and copy of Assignment stamped "COPY – DO NOT RECORD".
- (X) Return prepaid postcard.
- (X) The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment, to Account No. 11-1410.

*Adeel S. Akhtar*  
Adeel S. Akhtar  
Registration No. 41,394  
Attorney of Record

ASMMC.033AUS



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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	:	KIM et al.	)
Appl. No.	:	10/007,304	)
Filed	:	December 5, 2001	)
For	:	COPPER INTERCONNECT STRUCTURE HAVING STUFFED DIFFUSION BARRIER	)
Examiner	:	Unknown	)
Art Unit	:	Unknown	)

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MAY 30 2002  
TECHNOLOGY CENTER 2800

ESTABLISHMENT OF RIGHT OF ASSIGNEE TO TAKE ACTION  
AND  
REVOCATION AND POWER OF ATTORNEY

UNITED STATES PATENT AND TRADEMARK OFFICE  
P.O. Box 2327  
Arlington, VA 22202

Dear Sir:

The undersigned is empowered to act on behalf of the assignee below (the "Assignee"). A true copy of the original Assignment of the above-captioned application from the inventor(s) to the Assignee is attached hereto. This Assignment represents the entire chain of title of this invention from the Inventor(s) to the Assignee.

I declare that all statements made herein are true, and that all statements made upon information and belief are believed to be true, and further, that these statements were made with the knowledge that willful, false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001, and that willful, false statements may jeopardize the validity of the application, or any patent issuing thereon.

Appl. No. : 10/007,  
Filed : December 5, 2001

The undersigned hereby revokes any previous powers of attorney in the subject application, and hereby appoints the registrants of Knobbe, Martens, Olson & Bear, LLP, 620 Newport Center Drive, Sixteenth Floor, Newport Beach, California 92660, Telephone (949) 760-0404, **Customer No. 20,995**, as its attorneys with full power of substitution and revocation to prosecute this application and to transact all business in the U.S. Patent and Trademark Office connected herewith. This appointment is to be to the exclusion of the inventor(s) and his attorney(s) in accordance with the provisions of 37 C.F.R. §3.71.

Please use **Customer No. 20,995** for all communications.

ASM MICROCHEMISTRY OY

Dated: Espoo May 16, 2002 By: Ilkka Tiainen  
Ilkka Tiainen

Title: Managing Director

Address: Kutojantie 2B 02630 Espoo, FINLAND

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**PATENT**

Client Code: ASMMC.033AUS

Application No.: 10/007,304  
Filing Date: December 5, 2001

**ASSIGNMENT**

WHEREAS, We, Ki-Bum KIM, a citizen of Korea, residing at Byuksan Apt. #607-1702, Tap-Maeul, Yatap-Dong, Bundang-Ku, Seongnam-Shi, Kyunggi-Do, KOREA, Pekka J. SOININEN, a citizen of Finland, residing at Haltijatontuntie 21A1, FIN-02200, Espoo, FINLAND and Ivo RAAIJMAKERS, a citizen of The Netherlands, residing at Soestdijkseweg 389, Bilthoven 3723 HD, THE NETHERLANDS, have invented certain new and useful improvements in a COPPER INTERCONNECT STRUCTURE HAVING STUFFED DIFFUSION BARRIER for which we have filed an application for Letters Patent in the United States on December 5, 2001, which was assigned U.S. Application Serial No. 10/007,304, which claims the benefit under Title 35, United States Code §119 to Korean Patent Application No. 10-2000-0074025, filed on December 6, 2000;

AND WHEREAS, ASM MICROCHEMISTRY OY(hereinafter "ASSIGNEE"), a Finnish corporation, with its principal place of business at Kutojantie 2B, FIN-02630 Espoo, FINLAND, desires to acquire the entire right, title, and interest in and to the said improvements and the said Application:

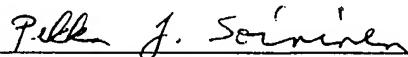
NOW, THEREFORE, in return for good and valuable consideration, the receipt of which is hereby acknowledged, we, the said inventors, do hereby acknowledge that we have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title, and interest throughout the world in, to and under the said improvements, and the said application and all provisional applications relating thereto, and all divisions, renewals and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all rights of priority under International Conventions and applications for Letters Patent which may hereafter be filed for said improvements in any country or countries foreign to the United States, and all Letters Patent which may be granted for said improvements in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and we hereby authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said improvements to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said improvements, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said improvements in all countries.

This 28<sup>th</sup> day of April, 2002

  
Ki-Bum KIM

This 15<sup>th</sup> day of April, 2002

  
Pekka J. SOININEN

This 22<sup>th</sup> day of April, 2002

  
Ivo RAAIJMAKERS